

MATERIALS AND GAS CHEMISTRIES FOR PROCESSING SYSTEMS

ABSTRACT

A plasma processing system for processing a substrate, is disclosed. The
5 plasma processing system includes a single chamber, substantially azimuthally
symmetric plasma processing chamber within which a plasma is both ignited and
sustained for the processing. The plasma processing chamber has no separate plasma
generation chamber. The plasma processing chamber has an upper end and a lower
end. The plasma processing chamber includes a material that does not substantially
10 react with the reactive gas chemistries that are delivered into the plasma processing
chamber. In addition, the reactant gases that are flown into the plasma processing
chamber are disclosed.